

App# No. 10/021,450  
Amndt. dated April 17, 2006  
Reply to Office action of January 17, 2006

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended): A method for servicing a Virtual Local Area Network (VLAN) by an access point, comprising:
  - storing a table associating a broadcast key with a VLAN local to the access point;
  - receiving a request for access to a network from a wireless station;
  - authenticating the wireless station with an authentication server responsive to the request;
  - receiving data from the authentication server with data identifying a VLAN identifier for the wireless station;
  - accessing the table local to the access point to determine an appropriate broadcast key for the VLAN identifier; and
  - transmitting the appropriate broadcast key to the wireless station.
2. (Cancelled).
3. (Previously Presented): The method of claim 1 further comprising the step of using a separate broadcast key associated with each VLAN to encrypt the data.
4. (Cancelled).
5. (Previously Presented): The method of claim 1 wherein the wireless station operates in accordance with the IEEE 802.11 standard.
- Claims 6 - 7. (Cancelled)
8. (Previously Presented): The method of claim 1 wherein the VLAN comprises a mobile IP subnet.

Appl No. 10/021,450  
Amdt. dated April 17, 2006  
Reply to Office action of January 17, 2006

9. (Previously Presented): The method of claim 8 further comprising a step of tagging data to determine to which VLAN the data belongs.

10. (Currently Amended): An access point, comprising:  
~~means for storing a table associating a broadcast key with a VLAN;~~  
means for receiving a request for access to a network from a wireless station;  
~~means for authenticating the wireless station with an authentication server;~~  
means for receiving data from the authentication server with data identifying a Virtual Local Area Network (VLAN) identifier for the wireless station;  
means for accessing ~~the~~ a table stored locally at the access point to determine an appropriate broadcast key for the VLAN identifier; and  
means for transmitting the appropriate broadcast key to the wireless station.

11. (Cancelled)

12. (Currently Amended): The ~~subnet-access point~~ access point of claim 10 further ~~comprising wherein~~ a separate broadcast key is associated with each VLAN to encrypt data.

13. (Cancelled)

14. (Currently Amended): The ~~VLAN-access point~~ access point of claim 10 wherein the wireless station operates in accordance with the IEEE 802.11 standard.

15. (Cancelled)

16. (Currently Amended): The ~~subnet-access point~~ access point of claim 10 further comprising a tag for data to determine ~~[[to]]~~ which ~~subnet-VLAN~~ VLAN the data belongs.

17. (Currently Amended): The ~~subnet-access point~~ access point of claim 10 wherein the VLAN comprises a mobile IP subnet.

App'l No. 10/021,450  
Amdt. dated April 17, 2006  
Reply to Office action of January 17, 2006

18. (Canceled)

19. (Previously Presented): A method according to claim 1, further comprising:  
receiving a session key from the authentication server;  
sending the session key to the wireless station; and  
encrypting the appropriate broadcast key with the session key for the wireless station.

20. (Previously Presented): An access point according to claim 10, further comprising:  
means for receiving a session key from the authentication server;  
means for sending the session key to the wireless station; and  
means for encrypting the appropriate broadcast key with the session key for the wireless station.

21. (Previously Presented): A wireless access point configured to send and receive wireless signals from a wireless station and responsive to an association request from the wireless station to authenticate the wireless station with an authentication server, comprising:  
a lookup table local to the access point containing broadcast key values corresponding to Virtual Local Area Networks(VLANs) identifiers;  
wherein the access point is responsive to receiving data identifying a VLAN identifier for the wireless station from the authentication server to ascertain an appropriate broadcast key corresponding to the received-VLAN identifier via the lookup table; and  
wherein the access point transmits the appropriate broadcast key to the wireless station.

22. (Previously Presented): An access point according to claim 21, further comprising the access point being configured to be responsive to receiving a session key from the authentication server for the wireless station to send the session key to the wireless station and to encrypt the appropriate broadcast key with the session key for the wireless station before sending the appropriate broadcast key to the wireless station.